### ADAPTABILITY OF THE WHEEL TO ALL PEOPLE.

HE improvement of the bicycle and its adaptability to all classes of humanity are contemporary. Ten years ago it was only the man of considerable means and the physically complete man who rode the wheel. Woman had not been provided for except by the heavy and cumbersome tricycle.

To-day the man of moderate means may own his own bicycle and the "lame, the halt and the blind" may ride. Mechanical devices have made it possible for cripples, as well as for sound men, to obtain the value of that exercise which has made the

The Journal has printed the story of the blind man who takes an outing every pleasant day on a tandom over the cycle paths, and this case is only one of many wherein persons not in the full possession of all

their faculties or all their limbs enjoy themselves on the "poor man's horse." Almost every day there rides on the cycle path a young lad of fifteen or sixteen years. His right hand has been amputated and all that remains of the left hand are the thumb and two fingers. He rests the stump of his right arm on the handle bar of the machine and manages to guide it and hold it steady with but little trouble on the roughest roads. His hardest task is o mount, but this he accomplishes after. considerable wabbling on the part of the bi-

One of the wealthiest of the Brooklyn sugar kings lost one of his legs at the knee. He watched bicycle riders and made up his mind that he could enjoy the pasficial leg. He went to a bicycle instructor, who taught him how to mount and dismount, as well as how to control the machine, and now he rides so perfectly that none but his friends are aware of the fact that one of his lower limbs is artificial.

Another man with one shriveifed and short leg and the other one perfectly sound applied to a bleycle dealer to know If he could ald him in learning to ride. For a time the dealer was a little non-plussed how best to meet the situation. He put the crippled man on a bicycle aud the latter, after going about the practice academy a score or more of times, said that his crippled leg was in the way and

"Do you think you could ride a bicycle and use one leg only," said the dealer, as a bright thought struck him.

"I don't see how I am going to ride in

any other way," was the reply.

The bleycle man thereupon took off the crank on the left side of the machine and adjusted to the crank hanger a step on which the shrivelled limb could be rested. The candidate for out-of-door fun learned to ride with the right leg only, and pedals up and down the cycle path just as gayly as his more fortunate brethren.

A lad of about twelve years may be seen almost every pleasant Sunday spinning merrily along some one of the good roads of Brooklyn. He has but one leg and rests the wooden peg, where the other leg should be, on the coaster attached to the front fork of the machine. He can only mount the bleycle from the curbstone or with the aid of a bystander, but he never lacks for friends to assist him.

Each pleasant morning one of the duplex machines in use in Brooklyn is wheeled out on the cycle path and an invalid womwho has been a paralytic for some time, is lifted to one of the sents and wheeled by an attendant to the ocean. She says she is gaining strength every day and hopes the exercise will return to her the partial

use of the stricken limbs. sities of the riders. They seem to have little trouble in pushing their bicycles quite as successfully as their healthy companions.

In East New York recently a rider was seen with both arms amputated at the etbows. On either side of the handle bar a peculiar sort of rest had been built up. Each rest was socket-shaped and in the hollows the cyclist placed the stumps of his arms and thus guided and controlled the machine. Being questioned how he succeeded in managing the wheel, he replied that he got along fairly well, although he dared not ride faster than seven or eignt mile an hour. He had a foot brake on tac blevole to check its speed in case of emergency. Rough roads bothered him most owing to the tendency of the front wheel to swerve.

#### AN EYE ON THE CHAIN. Y No Other Part of the Cycle Is Kept Clean, Be Sure That Part Is.

se sure that you do not forget the Importance that attaches to the chain of a bleycle. It is, of course, an absolute essential, but it can be made a pleasure or a pain as the owner of the wheel sees fit

to care for it.

pain as the owner of the wheel sees fit to care for it.

A dirty chain is a positive drawback to the best bleycle ever/made. It increases the labor of propelling the machine at least ten per cent. It also wears out the bleycle much quicker than might be expected from natural causes. It strains the frame because of the added force with which the rider pushes the pedals.

Not long ago a wheelman at the rest on Fort Hamilton avenue plaza of Prospect Park was complaining bitterly that his bleycle ran like a "load of stone." He had poured of into all the bearings until the machine fairly dripped with oil. It did no good. It never had struck him that the chain could be out of order. That was the secret of all his trouble. Mud was caked on every link and a thick, gummy substance had collected on all the teeth of the sprocket wheels. The chain was working through this mixture and quite unturally worked with anything but ease. It bound and clung to the wheels like a dry muclinge brush to a sheet of paper.

When the chain had been rubbed off, and a small stick had successfully been used to poke out about half a dozen ounces of black gum, the wheel ran with something of its original ease.

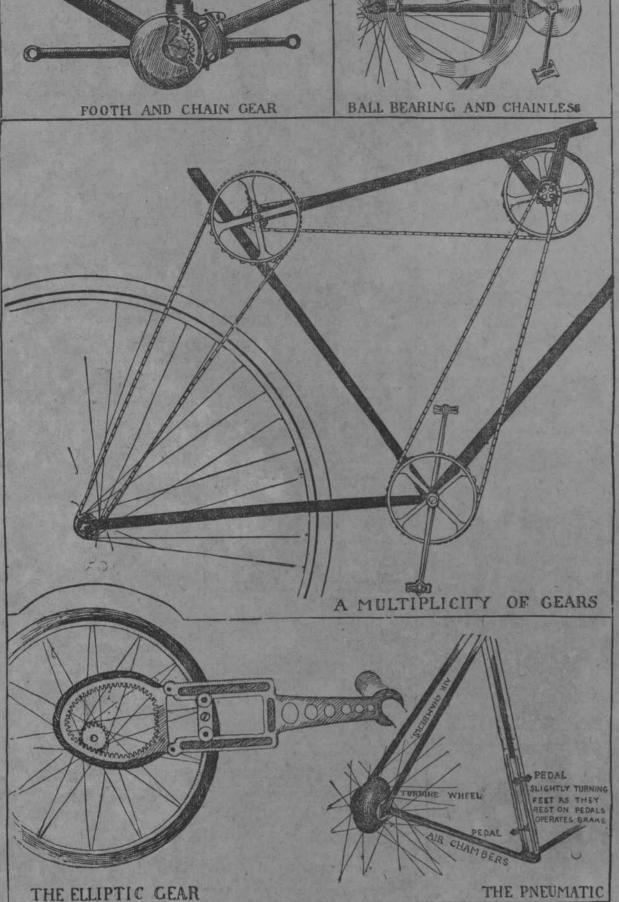
Wintever the cyclist may not do toward cleaning his bicycle, he should at least give the chain his undivided attention. Keep it clean, by all means.

#### Weather and Roads.

The weather forecast Saturday was for a most enjoyable Sunday for cyclists. The temperature promises to be very agreeable for riding, and the wind will probably not be strong enough to interfere with the

No trouble need be borrowed over the condition of the roads. Everywhere they are in splendld shape for

## GEAR FADDISTS OUT IN VERY LARGE NUMBERS, HORSEMEN'S NEW



At least a dozen children, with one leg shorter than the other, ride on the cyclo paths and on the roads in Central Park and Prospect Park. Cranks of different lengths are made to conform to the neces-

HE gear faddists are going to break loose with the force of a Swiss glacler during the coming Winter. Symptoms of it are in the air as well is in the Patent Office. The American of ideas, and there are very few of him without ideas, has solved a legion of theories how best to increase the speed of a bicycle and decrease the labor of propelling it, and many of these ideas have been put into demonstration.

James McCullum, of New York City, has a theory, illustrated by diagram number one, of increasing speed by increasing chains and wheels. It is on the old idea of transmitting power by a succession of cogs.

The cranks and pedals are attached to the sprocket wheel A. Power is transmitted to the small sprocket wheel B.

which revolves the large drive wheel on the other end of the axle, that, in turn, communicates motion to the small sprocket

wheel at C, which revolves the large sprocket wheel on the same axle and turns the rear wheel of the bicycle at D.

The theory of the originator is that the sprocket wheel at B will revolve three times while that of A revolves once. The sprocket wheel at C will revolve nine times while the sprocket wheel A revolves one, and the rear wheel of the blcycle will go around twenty-seven times while the feet on the sprocket wheel A make one revolution.

The estimated speed of this combination of wheels and chains is over sixty miles an hour, perhaps as high as ninety miles. If five gears were employed, the inventor is of the opinion that the bicycle would travel at the rate of 300 miles an hour. However, he fails to state what power he would have to move the combination of gears.

As a double gear on a tandem is about as much as an ordinary rider cares to propel for any great distance, a more complete system of chains could not be pushed, except by a giant.

If all the chains should break at once the rider would think haif a dozen cowboys were trying to lasso him at the

Diagram number two is that of a chainless, ball-bearing bicycle gear that is being manufactured and sold at the present time. This style of chainless wheel differs materially from the ordinary bevel gear, which has been the common type of chainless wheels in most of the attempts at getting rid of the linked power transmittor. The large wheel in this gear has nothing to do in increasing speed, acting merely in place of the chain.

Ball bearings are used in the gear, and it is asserted the blcycle has given satisfaction to those who have experi-

mented with it. For hill climbing it is alleged to be particularly effective. Diagram number three is called a tooth and chain gear, and is in use at the present time. The bicycle carries an ordinary chain, but dispenses with the large front sprocket wheel. There is a bevel cog gear inside the crank axle, which renders it easy, according to the theorists who have evolved the idea, to propel the machine. The gear is wholly unlike any

innovation that has appeared in the bicycle world. Easy hill climbing is claimed for this device.

Diagram number four is that of a wheel called "The Pneumath." Not only are the tires pneumatic, but the bicycle, as its name implies, is run by air pressure. The inventor is a man in New Hampshire. There is no rotary crank motion, but the feet and legs go straight up and down. It is claimed this reduces the strain on the frame.

By a simple arrangement connected with the rear hub the inventor insists that he saves all the power now lost in descending hills, and that it is bottled up and may be used any time to assist the rider. An attachment, operated from the seat, permits three gears to be employed. The inventor declares in good faith that he has tried the machine and that it is a success.

seat, permits three gears to be employed. The inventor deciares in good faith that he has tried the machine and that it is a success.

A Michigan inventor is responsible for the machine illustrated by diagram number five. For want of a better name it was called a monocycle. It does away with gears, sprockets and chains, but it has not travelled on any century runs up to date. The theory is after a somewhat old idea, the inner and smaller wheel working over teeth on the inside of the big wheel—in fact, always trying to ascend the inner rim. The big wheel is six feet in diameter and the smaller is twenty-plishes any other wonders.

Thomas Adams, of Highlands, N. Y., is the inventor of a chainless blcycle with an elliptical gear that he thinks has solved the problem of new propelling machinery. A machine of this type has been built and has been used by a gentleman residing in Brooklyn. He is said to be satisfied with it.

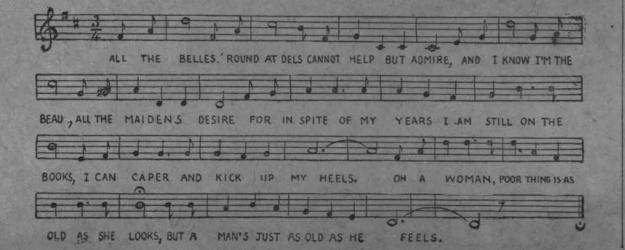
The crank A, attached to the hanger, as on all wheels, carries the connecting rod, B, over fulcrum rollers with ball bearings. On the opposite end of the crank the elliptic toothed arrangement, C, is fastened, working on the pinion, D, attached to the rear wheel instead of a sprocket wheel.

None of these new ideas follow the old theory of making a chainless blcycle, and none are modelled exactly after the style that it is expected a leading blcycle firm will put on the market.

Not only these, but a dozen more devices have been originated by ingenious Americans, and now that an actual attempt is to be made to supplant the chain with a chainless invention, there will be as many more.

"The Gayest Old Sport in New York,"

In Charlie Hoyt's new farce comedy is a song by Harry Gilfoll, entitled "The Gayest Old Sport in New York." The refrain of the song is especially happy, music and words together, and is as follows:



# CRY AGAINST

Horsemen say that if bicycle rating near had not been reeling off miles for the last two years better than two minutes the sensation accompanying the great mile made by the pacing king would have lasted a month instead of being all over in a better are so many excellent convents.

week.

The cyclists are not altogether certain that the horsemen are right. They are of the opinion that the horsemen are constitutional grumblers against the bicycle and would charge everything to the wheel if the world should wake up some morning and begin to revolve the wrong way.

The horsemen, and particularly the irrotting horse breeders, say that for forty years or more people have been discussing the two-minute harness horse, and now that there actually is such an animal he take the railroad from the Thirty-fourth street ferry to Flushing or from Flatbush avenue in Brooklyn to Jamaica, the route take the ride on a holiday he may find fewer companions, but he will find the roads astir with the explaining why either destination is acceptable.

If the run begins at Flushing ride straight out Broadway on the road to Roslyn, Don't imagine that the

#### To-day's Club Run Schedule

Arch Wheelmen, to Lake Hopatcong, at 9 a. m. Ascension Cyclers, to Fort Schuyler, at 9 a. m. Boscobel Wheelmen, to Tarrytown, at 920 a. m. Calumet Wheelmen, to Staten Island, at 820 a. m. Century Wheelmen of New York, to Rye Beach, t 820 a. m.; to New Rochelle, at 8:55 a. m.; to ft. Vernon, at 2 p. m. Double X Coterie Wheelmen, to the Oranges, at 8

Flectwood Wheelmen, to Englewood, at 9 a. m. Jackson Wheelmen, to Englewood, at 8 a. m. Klondyke Wheelmen, to Paterson, at 8 a. m. Lyceum Wheelmen, to Freeport, at 8 a. m. Linwood Wheelmen, to Babylon, at 9 a. m. Monarch Wheelmen, to Rye, at 9 a. m. Mount Morris Wheelmen, to Tottenville, at 9 a. m. Manhattan Bicycle Club, trip over New Jersey roads, at 5 a. m.

Morris Wheelmen, to Rye Beach, at 9 a. m.; to New Rochelle, at 2 p. m. Mecca Wheelmen, to Yonkers, at 9 a. m. Prospect Wheelmen, to East Orange, at 9 a. m. Riverside Wheelmen, to Lynbrook, at 9 a. m. Royal Arcanum Wheelmen, to Bath Beach, at 9 . m.; to Coney Island, at 2 p. m. San Salvador Wheelmen, to College Point, at 8:30

Sunset Wheelmen, to Yonkers, at 9 a. m.
St. George's Bicycle Club, to Hempstead, at 9

a. m.

Triumph Wheelmen, to the Hudson County Boulevard, at 9 a. m.

Tremont Wheelmen, to Yonkers, at 9 a. m.
Union League Wheelmen, trip over Long Island roads, at 9 a. m.

Vigilant Wheelmen, century run to Oakdale and return, at 6 a. m.

White Cycle Club, run through Westchester County, at 9 a. m.

Bushwick Wheelmen to Americally at 9 a. m.

Bushwick Wheelmen to Americally at 9 a. m.

Bushwick Wheelmen, to Amityville, at 9 a. m. Brevoort Wheelmen, to Coney Island, at 9 a. m. Brooklyn Bicycle Club, to Pompton Lake, at 3:15 Carroll Park Wheelmen, to Morristown, at 7:30 Concord Cycle Club, to Bayonne, at 9 a. m. Eastern District Wheelmen, to Oyster Bay, at 9

resport Wheelmen, to Stony Brook, at 9 a. m. reater New York Wheelmen, to Bath Beach, at 30 a.m. Indian Cycle Club, to Bath Beach and Coney sland, at 9 a.m. Kings County Wheelmen, out Merrick road, at 9 ng Island Wheelmen, to Boonton, at 9 a.m. gan Wheelmen, to Par Rockaway, at 9 a.m. serly Wheelmen, to Babylon, at 8 a.m. stauk Whoelmen, century run to Patchogue, at

m. Union Cycle Club, century run to Patchogue, at 8 Waverley Bicycle Club, to Staten Island, at 9 liamsburg Wheelmen, to Riverside Drive, at

From New Jersey Cities. Guttenburg Wheelmen, to Nyack, at 9 a. m., from club house, Guttenburg.
Casile Point Cyclers, to Hudson County Bouleard, at 930 a. m., from Park avenue, Hoboken, Atalanta Wheelmen, to Bayonne, at 9 a. m., from Halsey street, Newark.
East Orange Cyclers, to Staten Island, at 9 a. m., rom club house, East Orange.
Union County Wheelmen, to Staten Island, at 9 a. m., from Railway,
Arcannum Wheelmen, to Bepsonburg at 8 a. m. Arcanum Wheelmen, to Bensonhurt, at 9 a. m., om Jersey City.

Bicycles.

'96 STEARNS To Close Out 50 '97 SPECIAL \$75 TINKHAM CYCLE CO...

306-310 West 59th St.

#### PLEASANT TRIP ON THE CYCLE FROM FLUSHING.

M ORSEMEN have another fancted grievance against the bicycle. It is not particularly serious, because it is founded more on scutiment than on business reasons. It relates principally to the around Jamaica Bay, and have asked for representations are the serious and the second around Jamaica Bay, and have asked for representations. remarkable mile made by Star Pointer the other short trips on roads easily traversed, other day.

One day traversed the short trips on roads easily traversed. Horsemen say that if bicycle racing men ing a fifty mile ride when out for the day,

when she came to the United it is due, they say, to the fact that it is due, they say, to the fact that it is due, they say, to the fact that it is due, they say, to the fact that it is due, they say, to the fact that it is due, they say, to the fact that it is due, they say, to the fact that it is due, they say, to the fact that it is due, they say, to the fact that it is well "piked." If the run begins at Flushing ride of commonly people look upon two as something obsoicte, something out of date as the shadbone coat orefricters. This discussion about 1.30 and so on has been brought 1.30 and so on

of the road is down grade, and use caution while descending.

Mine-ola is the railroad centre of the society people who own places in and about two willes as to any marked improve the animals they breed is due as the adoption of the pneumatic tire sulkles as to any marked improve the animals themselves. Seven intelligent study of pedigrees complished as much as a few yards at robber hose pipe. Harness have profited by the time acceltant have made cycle racing stars that have made cycle racing stars that the performances of the last four years that have steadily the time, until the record of two was less than a second away bere Pointer made it, have prepared by the grand finale.

y, too, a great many turf fanciers forget the once despised pacing to beating the two minute record to the content of the content has still many more feet.

c lapse of time unless the train on the road at the dinner hour.

It is four miles to Mineola. The first part to the right and goes down made us scoff at ordinary speed of the road is down grade, and use caution to the plaza to meet the first parade. The

15 Yards Matting.

## A Complete Home for \$138.00

. Everything necessary for a four (4) room flat. The best value and most complete outfit ever offered for the money. See it before buying.

#### EVERYTHING FOR HOUSEKEEPING PARLOR: DINING-ROOM: Wide Wale Velour Parlor Suit, 5 pieces, Cherry Pier Mirror, bevelled

Handsome Large Rug, 7.6x10.6.

1 Oak Sideboard. 6 Oak Chairs. glass. Cherry Parlor Table. Brass and Onyx Lamp. Silk Lamp Shade. Pair White and Gold Frame Pictures. 1 Bed, brass 1 Handsome Table Cover.

Liberal Credit, Opens an This Couch, in elegant velour, well up-

polstered, no excelsior, wonderful value... 50c additional for above when packed for shipment out of town

BEDROOM. Antique Chamber Set,

3 pieces, 1 Bed Spring, 1 Tollet Set, 10 pieces, 1 Mattress, 1 Comfortable,1 Oak Rocker, 1 Oak Chair, 1 Pair Pillows, 10 Yards Matting.

This Chif- 3.75

KITCHEN: 1 Oak Kitchen Closet. 1 Range.

3 Kitchen Chairs.

1 Set Tinware, 25 pcs. 1 Kitchen Table: 12 yards Oilcloth.

J. BAUMANN & BRO., 1479, 1481 and 1483 Third Ave., at 84th St. 84th St. Station "L" or Cable Cars. Open Saturday till 10 P. M. 

> Bicycles. Bicycles.

\$65 \$65 We're not Philanthropists!! in this deal, but for your gain and our advantage \$65 \$65 we will, from now on, sell our stock of 1897 Mambler "18-Year-Old" \$65 \$65

Which must be built to keep our workmen busy till we start on 1898 Ramblers, at the price we would have to make Jan. 1st on 1897 "left-

over' stock, viz.: \$65 We want to winter them in

\$65

\$65. your storeroom, not ours. GORMULLY & JEFFERY MFG. CO., \$65

939-945 8th Ave., near 56th St.

Lexington Cycle Co., Down-town Agents, 26 Vesey Street.

\$65

\$65

\$65